



Kingston Conservation Advisory Council Minutes
Monthly Meeting, City Hall Council Chambers
Special Presentation on Natural Resource Inventory &
Habitat Summary
Date : May 13, 2014 Scheduled for 6:30 PM

Board Members

Julie Noble (Chair)
Diane Bonavita
Emilie Hauser
Susan Hereth
Lynn Johnson
Kevin McEvoy (Secretary)
Casey Schwarz
Gregg Swanzey (arrived late due to scheduling conflict on other City business)
Arthur Zaczekiewicz

Guests/Public Attendees:

Nelsie Aybar-Grau, Kingston resident, historic preservationist
Nancy Beard, Kingston resident
Aaron Bennett Ulster County Dept of Environment
Jennifer Schwartz Berky, Kingston Urban Agriculture Committee, Hone Strategic
Betsy Blair, DEC Hudson River Habitat Protection Manager & NERR Manager
Debra Bresnan, Kingston Land Trust Board & Land Use Committee
Nora Budziak, Environmental activist & researcher, Town of Ulster resident
Renno Budziak, Kingston Land Trust, Town of Ulster resident
Mark Carabetta, Milone and MacBroom
Hayes Clement, Heritage Area Commission Chair, KLDC
Mike D'Arcy, RUPCO, Climate Smart Kingston
Judith Deming, Kingston resident, former CAC member
Valeria Georghiou, local attorney and environmentalist, former CAC member & Secretary
Christopher Graham, Hudsonia
Hank Gross, Mid Hudson News, journalist
Laura Heady, DEC Hudson River Estuary Program
Andi Turco Levin, Chairperson Kingston Land Trust, Kingston ZBA, KLDC
Mary McNamara, LEWP, Esopus Creek Conservancy
Steve Noble, Kingston Parks & Recreation, Kingston Land Trust
Anne Stedje Outwater, Kingston resident
Tom Polk, Complete Streets Advisory Council
The Honorable James Quigley, Town of Ulster Supervisor
Beth Roessler, DEC Trees for Tribes Program
Donna Seymour, Kingston resident
Gretchen Stevens, Hudsonia
Christina Tobitsch, Kingston resident
Kristen Wilson, Live Well Kingston, Kingston Land Trust, Cornell Cooperative Ext.
Lynn Woods, Kingston resident and journalist
Mark Zion, Kingston resident



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6:15-6:40 Sign In: Sign-in Facilitated by Emilie Hauser with literature and refreshments available in Conference Room 1

6:40 Regular Business & Introduction:

(a) Regular Business: Chairperson Julie Noble called meeting to order and entertained a motion made by Diane which was seconded by Susan to adjourn regular CAC business and proceed to the Special Presentation on Natural Resource Inventory & Habitat Summary which motion was approved unanimously by the Council members present.

(b) Introduction: Julie continued with an introduction to the evening's presentation giving a brief description of the Habitat Summary and Natural Resource Inventory as an effort which can help lead the way towards the CAC goal of an Open Space Plan for Kingston pursuant to NYS Municipal Law Section 239-Y covering the CAC and giving a further description of open space in NYS as being defined as per the NYS Open Space Plan as land which is not intensively developed for residential, commercial, industrial or institutional use and further characterized therein as including, but not being limited to, open lands of natural beauty and critical habitat.

6:45 Overview: Emilie briefly described the Natural Resource Inventory and Habitat Summary and how it relates to habitat maps and summaries and open space as an initiative, of the Kingston Conservation Advisory Council in coordination with the state Department of Environmental Conservation's Hudson River Estuary Program and Hudsonia Ltd., to provide information to Kingston residents and decision makers on land use particularly with regards to habitats, natural resources, open space or land use planning. The projects which complement each other were coordinated between Laura Heady, Biodiversity Outreach Coordinator, at the DEC Hudson River Estuary Program who prepared the Habitat Summary and Gretchen Stevens Director of the Biodiversity Resources Center at Hudsonia Ltd. who prepared the Habitat Mapping with fieldwork provided by Christopher Graham, Hudsonia staff biologist. Emilie further discussed the Catskill & Adirondack Parks as examples of planned open space protecting natural resources, habitat and water supply and further discussed the need to integrate the natural resource, habitat and open space initiatives of the CAC into the pending comprehensive plan language while Arthur mentioned that spending time in nature can be useful in reducing stress.

SECRETARY'S NOTE: An additional CAC initiative entitled "Preliminary Review of Open Space and Natural Resources for the City of Kingston" for which Emilie Hauser is principal author complements the Habitat Summary and Habitat Mapping.

6:50 Comprehensive Plan update: Julie learned from the Kingston Planning Dept that a Comprehensive Plan Steering Committee Meeting is scheduled to be held on June 4, 2014.

6:55 Habitat Summary, Laura Heady, NYSDEC Hudson River Estuary Program, Cornell Univ.: Laura began with an Overview of Natural Areas and Habitat Summary for City of Kingston and a description of the Hudson River Estuary Program and its mission to protect clean water, protect fish, wildlife include habitat, recreational access, adapt to climate change, conserve scenery describing steps in conservation such as identifying, prioritizing protecting and managing resources and raising planning capacity of municipalities and continued with a



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summary overview of a Habitat Summary as a written summary of existing data, prepared on request for municipality, which includes maps, tables, figures, text, principles on conservation strategy.

A description of the Kingston Habitat summary followed. The Habitat Summary Report includes complementary text, maps, and tables. The Habitat Summary text describes what is known about the city's important natural areas and habitats and has the same headings as the maps. It details the information in the maps, including the ecological importance of the data and its sources. There are eight habitat maps for the City of Kingston, which follow the text:

Figure 1: Regional Context of Kingston, NY: This includes larger ecological system taken within the regional context of the Hudson estuary and its significant biodiversity areas, and limestone bedrock and its three watershed areas Rondout and Esopus Creeks and direct flow to the Hudson.

Figure 2: Major Ecological Features in Kingston, NY: This includes Coastal fish & wildlife habitat, Rondout Creek and Poughkeepsie-Kingston deep-water areas, limestone, crest & ledge, natural areas such as streams, stream habitat areas, wetland, flood plains, water bodies, forested areas and significant coastal fish & wildlife as well as active and abandoned railroad right of way. Habitat areas include areas suitable for Indiana bat and migratory fish.

Figure 3: Streams and Watersheds in Kingston, NY: Include both the Esopus and Rondout-Hudson watersheds, FEMA 100 (1%) & 500 (.2%) year floodplains, floodways mentioning stream habitat including the American eel, Alewife and Blueback Herring, migratory habitat (Tidewater to Eddyville).

Figure 4: Wetlands in Kingston, NY: National Wetland Inventory and NYSDEC wetlands are shown as well as possible wetlands based on soil maps and soil drainage, (somewhat poorly drained soils (and probable wetlands indicated as poorly drained soils or very poorly drained soils).

Figure 5: Forests in Kingston, NY area: Forests shown include fragmented forested areas containing 0-199 acres, stepping stone forests containing 200-1999 acres such as the Kingston-Ulster borders including the Delaware Forest and adjoining Flatbush Ridge as well as the Fly Mt. Area near Rondout Creek and Eddyville, locally significant forests containing 2000-5999 acres and regionally significant forests containing 6000-14999 acres such as areas in nearby Town of Esopus including Hussey Hill, Shaupeneak Mountain, Esopus Meadows, Black Creek and elsewhere as well as the Town of Ulster near or within the Catskill Blue Line and globally significant forests containing 15000 + acres such as Catskills.

Figures 6, 7 & 8: Hudson River Shoreline Habitat & Types in Kingston, NY: This includes coastal fish and wildlife habitat including submerged aquatic vegetation areas dominated by water celery but storm damaged during Hurricane Irene, tidal wetlands, Hudson River and riverine



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communities, rare wildlife including the least bittern, pied bill grebe, Indiana bat, anadromous fish, plants including Davis sedge and the possibility of Hartley's plantain.

Descriptions of grassland, shrubland, and young forest habitats are included in the text but not mapped. Following the maps, Tables 1 and 2 list known species and habitats of conservation concern that have been recorded for Kingston.

Table 1: State Rare Plants, Animals, and Ecosystems in Kingston, NY

Table 2: Significant Birds in Kingston, NY

At the end of the summary, the references section lists the sources of information used to develop this document and places to find more information. General conservation measures for protecting natural areas and wildlife are also provided.

Laura further described how the habitat summary can be used in planning strategies: preparing inventory, policy and implementation with suggestions of ways to not fragment natural habitat areas and preserve links between habitats such as buffer zones on streams mentioning Town of Hyde Park which identified several critical environmental areas in such way.

7:25 Questions & Answers:

- a. Lynn Woods questioned on vernal pool protection, to which Laura responded that NYS does not protect under 12.4 acres, and discussed Army Corp process regarding US waterways and made a recommendation to educate the public about breeding habitat and surrounding forest as a buffer with an alternative to create critical environmental area.
- b. Mary questioned regarding day lighting streams to which Laura responded mentioning watershed planning, and Estuary RFP for grants.
- c. Valeria questioned regarding fish ladders for herring to which Betsy Blair responded concerning the Eddyville dam and lack of passage for fish and that fish ladder and that research is needed concerning integrity of dam and habitat beyond the dam,

7:30 Hudsonia Habitat Mapping: Emilie introduced Gretchen Stevens from Hudsonia who presented the mapping entitled Significant Habitats in the City of Kingston overlays on the map include various significant habitats in the City of Kingston. Gretchen began with a discussion regarding the Biodiversity assessment in 2009, which was a 10 month training course with City of Kingston and Town of Ulster representatives. This training program in coordination with Hudson River Estuary Program mapped habitats adjacent to the Esopus Creek in the City of Kingston & Town of Ulster. Regarding the present mapping document, since there was limited time and funding, the mapped areas included Esopus Creek previously mapped along with Rondout and Hudson watershed areas excluding heavily urbanized areas. Gretchen described and explained three principle areas of Kingston mapped (i) northwest Kingston along Esopus near Manor Lake and vicinity and along the U&D and O&W railroad corridors, (ii) Hudson River area to the north(Hudson Landing, the Hutton Brickyard and Kingston Business Park) with descriptions of the significance of waste land habitat, forest and submerged aquatic vegetation; (iii) South area of the map includes Rondout Creek, forests and cultural areas such as cemeteries & Twaalfskill Golf



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course. Gretchen discussed that habitats are useful for conservation planning, that loss of habitat and degradation are cause of extinctions and that habitat protection can easily be incorporated into local land use planning, ordinances.

Ecologically significant habitat maps include areas of (a) upland forest, important for species of concern such as songbirds including, but not limited to, wood thrush and scarlet tanager, (b) Vernal & intermittent ponds, important for amphibians, salamanders & wood frog and which capture precipitation and snowmelt, (c) upland meadows, (d) Calcareous ridge, (e) 100 & 500 year Floodplain: much of it is undeveloped, conservation of which will protect habitats, (f) floodplain forests including hard wood forests, (g) large meadows including upland meadows habitat for pollinators & small mammals, (h) wet meadows, (i) Crest ledge & talus which includes purple cliffbrake found by Chris Graham, green rock cress, (j) Montrepose Cemetery area which has prickly pear; (k) Caves: which contain the eastern small footed bat (species of special concern), northern long eared bat (candidate for Federal Endangered) and the Indiana bat (l) Intermittent streams mapped here which may not appear on other maps noting that the Louisiana water thrush (greatest conservation need) appears in Kingston.

Gretchen categorized the use of habitat information as follows:

1. Identify large areas for planning
2. Identify infill development sites
3. Design new land uses to maintain habitat connectivity
4. Suggested site plan design, which can protect habitat and allow development at the same time.

Gretchen further discussed that the Natural Resource and Habitat Map of Kinston needs to be considered with the regional framework of the Calcareous Ridge in Rosendale, and Binnewater to the south and Flatbush Ridge to the north, which Nora Budziak has been instrumental in documenting. Both areas north & south of the City limits have large contiguous forests, and relatively unfragmented habitat areas. A Hudsonia Biodiversity assessment for Rosendale Binnewater area is imminent.

To summarize, the Kingston Natural Resource and Significant Habitat maps prepared by Hudsonia show three principal areas of significant habitat with the city mainly on the city edges largely excluding the highly urbanized central areas. Areas portrayed include:

- (1) An area to the east portion of the City with calcareous ledges, some upland meadows, rocky barrens, upland hardwood, mixed and conifer forests, hardwood swamps, some "waste ground" and along the Hudson River and Rondout Creek wetland habitats such as wet meadows and hardwood swamps and tidal habitats such as submerged aquatic vegetation, intertidal mix, water chestnut, reeds and cattails.
- (2) Southwest portion of the city which mainly consists of calcareous ledges, some upland scrublands and meadows, rocky barrens, upland hardwood, mixed and conifer forests, some "waste ground" and cultural areas such as cemeteries and gold courses.



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(3) Riparian lands along Esopus Creek characterized by upland meadows and swamps, wet meadows, constructed ponds and floodplain forests.

8:05 Questions and Answers: Jennifer questioned on critical environmental areas, Section 239-y, and development recommendations while Lynn questioned on best course of action to protect habitat to which Gretchen replied that the best course is to identify critical environmental areas, provide education and public outreach regarding such areas and significant habitat which answer was followed up by Arthur and Laura with a discussion of careful Environmental Assessment Forms reviews with regards to critical habitat which Laura linked to the Habitat Summary mentioning the use of Natural Resource and Habitat maps to make planning recommendations.

8:10 Participatory Mapping Exercise

Emilie gave instructions to the attendees to locate and identify on the maps provided scenic views, favorite walks, unusual geological formations, notable trees, areas of significance including natural, historic or cultural resources.

The assembled attendees broke out into various tables each provided with a map of Kingston and identified the following as per the instructions:

Table 1: Hasbrouck Park, Kingston Business Park forests and “megalith” rock formation, Island Dock, wooded areas and creek frontage in Wilbur, Ulster & Delaware RR corridor

Tables 2 & 3 combined together: Bat habitats such as Delaware Forest caves & McEntee St., view from West Chestnut together with notable evergreens, maple and tulip trees, Block Park, spring in the Fly Mt vicinity, prickly pear, Bald cypress at Academy Green, Island Dock

Table 4: Hasbrouck Park, Hawk sightings at Lindermann & Pearl, Forsyth Park, Esopus Floodplain, Prickly Pear in the Montrepose vicinity, Kingston Point Park, Hutton Brickyard & the scenic tidal flats, U&D Railroad Bridge over the Esopus Creek,

Table 5: Main St. Brook, Johnson Avenue trees, wooded areas at end of Highland Avenue, views of Catskills from Clifton Avenue, views from Hasbrouck Park

Table 6: Hasbrouck Park, sugar maple trees, Hutton Brickyard, West Chestnut St., deer sightings on Spruce St. in Rondout, Kingston Business Park forest

8:30 –9:00 PM Refreshments and Networking, – Conference Room 1